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Abstract

The present invention discloses a method for predicting the voltage of a battery, in particular a vehicle battery. The method according to the invention makes it possible to predict a voltage drop before it actually occurs as a result of a load. For this purpose, a filtered battery voltage and a filtered battery current are first of all determined from battery data, such as the battery voltage, the battery current, the battery temperature and the dynamic internal resistance. The resistive voltage drop across the dynamic internal resistance is determined from the difference current between the filtered battery current and the predetermined load current. Furthermore, a polarization voltage is calculated as a function of the filtered battery current, and is then filtered. The predicted battery voltage is calculated from the filtered battery voltage, minus the resistive voltage drop and the filtered polarization voltage. A decision on further measures can be made on the basis of this predicted battery voltage.